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20. A NEW RECORD OF THE CORAL *PAVONA VENOSA* (EHRENBERG, 1834)
(SCLERACTINIA, AGARICIIDAE) FROM ANAIPAR ISLAND,
GULF OF MANNAR BIOSPHERE RESERVE

A total of 208 species under 15 families and 60 genera of Scleractinian corals are reported from India (Venkataraman *et al.* 2003). According to a recent revision, among the four major zones of coral reefs of India, Andaman and Nicobar Islands are the most diverse in coral species (177 forms). Lakshadweep Archipelago ranks second (91 forms) and Gulf of Mannar Biosphere Reserve (GoMBR) ranks third (82 forms) in coral species diversity. The pioneer workers on the Gulf of Mannar (Thurston 1890; Brook 1893; Bernard 1897, 1905; Pillai 1967a, b, c) reported the richness of coral species diversity in this region and described the area as one of the hotspots for marine diversity. Although studies have been conducted on the coral reefs of GoMBR, information about the species diversity is still incomplete. The present report deals with the new record of *Pavona venosa* (Ehrenberg 1834) (Scleractinia: Agariciidae) from Anaipar Island, Gulf of Mannar Biosphere Reserve.



Fig. 1: *Pavona venosa* (Ehrenberg, 1834)



Fig. 2: Corallites of *Pavona venosa*

Description

Phylum: Cnidaria
Class: Anthozoa
Subclass: Zoantharia de Blainville, 1830
Order: Scleractinia Bourne, 1905
Family: Agariciidae Gray, 1847
Genus: *Pavona*

The Family Agariciidae includes six extant hermatypic genera – *Agaricia*, *Coeloseris*, *Gardineroseris*, *Leptoseris*, *Pachyseris* and *Pavona* – of which five genera, except *Agaricia*, are reported from India. Most of the genera are colonial. Colonies are massive, laminar or foliaceous. Corallites are immersed with poorly defined walls formed by thickening of the septo-costae. Septa seldom fuse and are continuous between adjacent corallite centres. Species of Family Agariciidae are most similar to those of Family Siderastreidae (Veron 2000).

The colonies of the genus *Pavona* are massive, laminar or foliaceous, the latter usually being bifacial. The corallites have poorly defined walls. They are small shallow depressions, usually with a central columella, sometimes separated by ridges. The corallites are interconnected by exert septo-costae. *Pavona* closely resembles *Leptoseris*, which has similar corallites but has fine septo-costae. Foliaceous colonies are unifacial in *Leptoseris*, but the distinction between genera may sometimes be unclear. Nine species representing the genus *Pavona* have been recorded in India (Venkataraman *et al.* 2003).

Pavona venosa (Ehrenberg, 1834) (Figs 1, 2)

Pavona (*Polyastra*) *venosa* (Ehrenberg), Wells 1936. *Ann. Mag. nat. Hist. Ser.* 10: 550, pl. 9, figs. 4, 5.

Pavona (*Polyastra*) *venosa* (Ehrenberg), Umbgrove 1939. *Zool. Meded. Rijksmus. nat. Hist. Leiden* 22: 48, pl. 15, figs. 1-5.

Pavona (*Polyastra*) *obtusata* (Quelch); Nemenzo 1955. *Nat. Appl. Sci. Bull.* 15(1): 16, pl. 9, fig. 4.

Pavona (*Polyastra*) *obtusata* (Quelch); Reddiah 1977. *Rec. zool. Surv. India* 72: 322.

Pavona venosa (Ehrenberg); Veron and Pichon 1979. *Australian Inst. of Mar. Sci., Australia*. Vol. 4: 30-33.

Material: During the status survey on GoMBR (May 21, 2003), two colonies were observed while snorkeling in the intertidal reef flat from the Anaipar Island, GoMBR (9° 9' 04" N; 78° 41' 38" E) by K.P. Raghuram, Marine Biological Station, ZSI, Chennai (Reg. No. ZSI/MBS-C/0001 dt. July 12, 2003).

Distribution: In India, it has been recorded only from the Andaman and Nicobar Islands (Reddiah 1977). Worldwide it is distributed throughout the Red Sea, Indonesia, Marshall Islands and the Great Barrier Reef, Australia.

Characters: Colonies are massive. Corallites are arranged in shallow sinuous valleys (Fig. 2). The valleys are

2.5-3.5 mm wide and 0.8-1.3 mm thick. Columella may be present, but is not well distinguished, or absent; the corallites are 1.54 to 2.43 mm in diameter. Calices range from 1.26-1.43 mm in diameter. There are three orders of septa; the septa are granulated and the primary septa are joined at the base; the corallites are interconnected by exert septo-costae (Fig. 2), coenosteum absent. The average (n=2) length, width, height and circumference of the colonies are 1.25 m, 1.01 m, 0.23 m, 3.11 m respectively. The colonies are yellowish brown in colour.

Habitat: Found on intertidal reef flat.

Remarks: The coral is uncommon. Silt gets deposited in the upper portion of the colonies due to sedimentation along the intertidal region. While describing the coral reefs of the Andaman and Nicobar Islands, Reddiah (1977) included the present species as *P. (Polyastra) obtusta* and stated that it is not found in the Andaman Islands, but is common in Nicobar Islands. However, Reddiah (1977) did not mention the exact location of the collection of the species.

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